Mar 1582

Duncan:Cal

Pope Gregory issued a brief which abolished the use of the Julian Cal. and substituted the Gregorian Cal. effective in Oct. 1582

Oct 4 + 1 day = Oct 15, 1582

1582

Duncan:Cal

Tycho Brahe approved the new calendar and dated his letters using the new calendar.

1582

Duncan:Cal

1502-1585 Pope Gregory XIII

Was born UGO BUONCOMPAGNI

The son of a noble family in Rome, he became a prominent ecclesiastic lawyer and senior papal official before being elected Pope Gregory XIII @ age 70 on May 14, 1572.

He worked to rebuild authority of the church and to reform its worst excesses.

The Church in Rome remained the only

force in Western Europe capable of exerting anything like a universal authority. It also had been the guardian of the calendar for centuries. In 1570's Rome was had population of 60,000. The Pope met with his calendar commission in 1581.

1582 Duncan:Cal

Easter is supposed to fall on 1st Sun after the 1st FULL MOON after the spring equinox.

Time reckoners had long used the 19-yr Metonic Cycle. The moon's cycle runs roughly an hour & 1 half behind the 19-yr solar cycle

Lilius calculated that the lunar-solar gap equals 1 hour 27.5 min

which means that the moment drifting against the Church's Gregorian Cal. by a whole day every 312.7 yrs. By the 1570's there error had amounted to more than 4 complete days.

Lilius & the commission scrapped the old metonic assumption. He concentrated on a method for keeping the Gregorian Cal from sliding a day every 312.7 yrs. He discovered that 8 periods of 312.7 yrs equal almost 2,500 years - thus his solution

Lilius rejected a long standing proposal by Bacon to drop a day roughly every 134 days. He discovered that the gap amounted to 3 days gained against the true year every 402 yrs (134X3). This he rounded to 3 days every 400 yrs

The formula based on tables not

entirely precise and a base number that is rounded off, ended up being remarkably accurate, running ahead of the seasons only 1 day every 3300 years.

Ulicis opted simply to choose a value for the year based on what was then one of the more popular astronomical tables. These were the ALFONSINE TABLES originally written in 1252 and updated over the years.. They gave the mean tropical year of 365 d 5h 49m and 16s. Some

30 sec slower than the time you

Gregorian Cal gives
365d 5h 48m 20s
as length of yr.
26s too short